

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 09/895,435B  
Source: IFW16  
Date Processed by STIC: 12/29/04

***ENTERED***



IFW16

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/895,435B

DATE: 12/29/2004

TIME: 14:51:43

Input Set : A:\29248-17 seq list.ST25.txt  
 Output Set: N:\CRF4\12292004\I895435B.raw

```

3 <110> APPLICANT: DE CLERCQ, BRANTS & PARTNERS C.V.
4     STEWART, A. Francis
5     ZHANG, Youming
6     HALLET, Bernard
8 <120> TITLE OF INVENTION: TYROSINE RECOMBINASE FOR GENETIC ENGINEERING
10 <130> FILE REFERENCE: 29248/17
12 <140> CURRENT APPLICATION NUMBER: US 09/895,435B
13 <141> CURRENT FILING DATE: 2001-06-30
15 <160> NUMBER OF SEQ ID NOS: 10
17 <170> SOFTWARE: PatentIn version 3.2
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 244
21 <212> TYPE: DNA
22 <213> ORGANISM: Bacillus thuringiensis
24 <400> SEQUENCE: 1
25 ggtaccgcca gcatttcgga aaaaaaccac gctaagaaaa tcagagttaa aaaatcagaa      60
27 aatatatacat tattcccttga cacatacatg ttctttttt atacaaaaaa taataacaaca    120
29 caatattaat tgtgttgtat taggtgttat aataaatata aatctagggg tttaacgcaa    180
31 cacaatttat cgataaataaa atacttttag acgcaacaca atttatacac gcggaggaaa   240
33 tcac                                         244
36 <210> SEQ ID NO: 2
37 <211> LENGTH: 118
38 <212> TYPE: DNA
39 <213> ORGANISM: Bacillus thuringiensis
41 <400> SEQUENCE: 2
42 taataacaaca caatattaat tgtgttgtat taggtgttat aataaatata aatctagggg      60
44 tttaacgcaa cacaatttat cgataaataaa atacttttag acgcaacaca atttatacac    118
47 <210> SEQ ID NO: 3
48 <211> LENGTH: 32
49 <212> TYPE: DNA
50 <213> ORGANISM: Bacillus thuringiensis
52 <400> SEQUENCE: 3
53 taataacaaca caatattaat tgtgttgtat ta                               32
56 <210> SEQ ID NO: 4
57 <211> LENGTH: 249
58 <212> TYPE: DNA
59 <213> ORGANISM: Bacillus thuringiensis
61 <400> SEQUENCE: 4
62 ggggtaccgc cagcatttcg gaaaaaaaaacc acgctaagaa aatcagagtt aaaaaatcag      60
64 aaaaatatac attattccaa gacacataca gtgtctttt ttatacaaaaa aataatacaa    120
66 cacaatatta attgtgttgtt attaggtgtt ataataaata taaatctagg ggtttaacgc    180
68 aacacaattt atcgataaaat aaatactttt agacgcaaca caatttatac acgcggagga   240
70 aatcacatg                                         249

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Input Set : A:\29248-17 seq list.ST25.txt  
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73 <210> SEQ ID NO: 5  
 74 <211> LENGTH: 798  
 75 <212> TYPE: DNA  
 76 <213> ORGANISM: Bacillus thuringiensis  
 78 <400> SEQUENCE: 5  
 79 atggatgtt caaaaacagg ttctttttat cttaaaacaag agaataaaac cgagaacact 60  
 81 gtcaggat acacatcagg tatttagacag tacataaaaat gtttgaagg ttccttatgac 120  
 83 agaaaattga caaaaattgtt ccgcacaaaat atcttagagt acatttagta tttaaagaat 180  
 85 gtcaaaatgt tgaacgcca a gtcattaa cacaagatta gtagccttgc taaaatttaat 240  
 87 gaatttctaa tacagaaaagg aagtcaacaa gatcaagtaa ttttattaga tgtaaaaaaag 300  
 89 tttttacaaa gtgtgtt g gataataac aaacgttaat atgcaattgc cacttccta 360  
 91 gcatatacag gactacgtat ttcagaggca ttatctatca aatgaatga cttaattta 420  
 93 cagactgggg aatgttatt tcgaagtggaa aaggaggta aacaacgaaat tgtattacta 480  
 95 aatagtaagg tacttagtgc tatcaaagat tatctcatcg atcgaaaaac atacagtaca 540  
 97 gcacatgaat ctccgtatct ttttattatg aaaaagcgag aaaagctgaa ccgtacggc 600  
 99 gtcaatcgta tctttaaattc atacaggaat gtttattactc cacaccaatt acgacacttc 660  
 101 ttctgtacga atgcaattca aaaaaggattt agcattcatg aagttgcaaa tcaagctggg 720  
 103 cactctaaca tccatacgc actactttac acaaattccaa accaactgca gctaaaaaat 780  
 105 aaaaatggagc tcttataa 798  
 108 <210> SEQ ID NO: 6  
 109 <211> LENGTH: 265  
 110 <212> TYPE: PRT  
 111 <213> ORGANISM: Bacillus thuringiensis  
 113 <400> SEQUENCE: 6  
 115 Met Asp Val Ala Lys Gln Phe Ser Ser Tyr Leu Lys Gln Glu Asn Lys  
 116 1 5 10 15  
 119 Thr Glu Asn Thr Val Gln Gly Tyr Thr Ser Gly Ile Arg Gln Tyr Ile  
 120 20 25 30  
 123 Lys Trp Phe Glu Gly Ser Tyr Asp Arg Lys Leu Thr Lys Leu Tyr Arg  
 124 35 40 45  
 127 Gln Asn Ile Leu Glu Tyr Ile Ser Tyr Leu Lys Asn Val Lys Met Leu  
 128 50 55 60  
 131 Asn Ala Lys Ser Ile Asn His Lys Ile Ser Ser Leu Ala Lys Phe Asn  
 132 65 70 75 80  
 135 Glu Phe Leu Ile Gln Lys Gly Ser Gln Gln Asp Gln Val Ile Leu Leu  
 136 85 90 95  
 139 Asp Val Lys Phe Leu Gln Ser Val Leu Glu Asp Asn Asn Lys Arg  
 140 100 105 110  
 143 Asn Tyr Ala Ile Ala Thr Leu Leu Ala Tyr Thr Gly Val Arg Ile Ser  
 144 115 120 125  
 147 Glu Ala Leu Ser Ile Lys Met Asn Asp Phe Asn Leu Gln Thr Gly Glu  
 148 130 135 140  
 151 Cys Ile Ile Arg Ser Gly Lys Gly Gly Lys Gln Arg Ile Val Leu Leu  
 152 145 150 155 160  
 155 Asn Ser Lys Val Leu Ser Ala Ile Lys Asp Tyr Leu Ile Asp Arg Lys  
 156 165 170 175  
 159 Thr Tyr Ser Thr Ala His Glu Ser Pro Tyr Leu Phe Ile Ser Lys Lys  
 160 180 185 190  
 163 Arg Glu Lys Leu Asp Arg Thr Val Val Asn Arg Ile Phe Lys Ser Tyr

## RAW SEQUENCE LISTING

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Input Set : A:\29248-17 seq list.ST25.txt  
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```

164      195          200          205
167 Arg Asn Val Ile Thr Pro His Gln Leu Arg His Phe Phe Cys Thr Asn
168      210          215          220
171 Ala Ile Gln Lys Gly Phe Ser Ile His Glu Val Ala Asn Gln Ala Gly
172 225          230          235          240
175 His Ser Asn Ile His Thr Thr Leu Leu Tyr Thr Asn Pro Asn Gln Leu
176          245          250          255
179 Gln Leu Lys Asn Lys Met Glu Leu Leu
180          260          265
183 <210> SEQ ID NO: 7
184 <211> LENGTH: 116
185 <212> TYPE: DNA
186 <213> ORGANISM: Bacillus thuringiensis
188 <400> SEQUENCE: 7
189 taataacaaca caatattaaat tgtgttgtat taggtgttat aataaatata tatctagggg      60
191 tttaacgcaa cacaatttat cgataaataaa atacttttag acgcaacaca atttat      116
194 <210> SEQ ID NO: 8
195 <211> LENGTH: 116
196 <212> TYPE: DNA
197 <213> ORGANISM: Bacillus thuringiensis
199 <400> SEQUENCE: 8
200 taataacaaca caatattaaat tgtgttgtat taggtgttat aatatatata aatctagggg      60
202 tttaacgcaa cacaatttat cgataaataaa atacttttag acgcaacaca atttat      116
205 <210> SEQ ID NO: 9
206 <211> LENGTH: 116
207 <212> TYPE: DNA
208 <213> ORGANISM: Bacillus thuringiensis
211 <220> FEATURE:
212 <221> NAME/KEY: N_region
213 <222> LOCATION: (33)..(64)
214 <223> OTHER INFORMATION: n = a, t, g, or #c
216 <220> FEATURE:
217 <221> NAME/KEY: misc_feature
218 <222> LOCATION: (33)..(64)
219 <223> OTHER INFORMATION: n is a, c, g, or t
221 <220> FEATURE:
222 <221> NAME/KEY: N_region
223 <222> LOCATION: (81)..(100)
224 <223> OTHER INFORMATION: n = a, t, g, or #c
226 <220> FEATURE:
227 <221> NAME/KEY: misc_feature
228 <222> LOCATION: (81)..(100)
229 <223> OTHER INFORMATION: n is a, c, g, or t
231 <400> SEQUENCE: 9
W--> 232 taataacaaca caatattaaat tgtgttgtat tannnnnnnn nnnnnnnnnn nnnnnnnnnn      60
234 nnnnacgcaa cacaatttat nnnnnnnnnn nnnnnnnnnn acgcaacaca atttat      116
237 <210> SEQ ID NO: 10
238 <211> LENGTH: 124
239 <212> TYPE: DNA

```

## **RAW SEQUENCE LISTING**

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Input Set : A:\29248-17 seq list.ST25.txt  
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240 <213> ORGANISM: *Bacillus thuringiensis*  
243 <220> FEATURE:  
244 <221> NAME/KEY: N\_region  
245 <222> LOCATION: (33)..(74)  
246 <223> OTHER INFORMATION: n = a, t, g, or #c  
248 <220> FEATURE:  
249 <221> NAME/KEY: misc\_feature  
250 <222> LOCATION: (33)..(74) ✓  
251 <223> OTHER INFORMATION: n is a, c, g, or t  
253 <400> SEQUENCE: 10  
  
W--> 254 taatacaaca caatattaat tgtgttgtat tannnnnnnn nnnnnnnnnn nnnnnnnnnn 60  
256 nnnnnnnnnn nnnnacgcaa cacaatttac gataaataaa tacttttaga cgcaacacaa 120  
258 ttta 124

RAW SEQUENCE LISTING ERROR SUMMARY                   DATE: 12/29/2004  
PATENT APPLICATION: US/09/895,435B               TIME: 14:51:44

Input Set : A:\29248-17 seq list.ST25.txt  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; N Pos. 33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52  
Seq#:9; N Pos. 53,54,55,56,57,58,59,60,61,62,63,64,81,82,83,84,85,86,87,88  
Seq#:9; N Pos. 89,90,91,92,93,94,95,96,97,98,99,100  
Seq#:10; N Pos. 33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52  
Seq#:10; N Pos. 53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72  
Seq#:10; N Pos. 73,74

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/895,435B

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Input Set : A:\29248-17 seq list.ST25.txt  
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L:232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0

M:341 Repeated in SeqNo=9

L:254 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0

M:341 Repeated in SeqNo=10